



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/435,748 11/08/99 BUCKLEY

J N19.12-0028

EXAMINER

IM22/0327

WESTMAN CHAMPLIN & KELLY PA
SUITE 1600 INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS MN 55402-3319

RUTHKOSKY, M

ART UNIT

PAPER NUMBER

1745

DATE MAILED:

03/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.
09/435,748

Applicant(s)
Buckley

Examiner
Ruthkosky, Mark

Group Art Unit
1745



☒ Responsive to communication(s) filed on Dec 10, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-51 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 1-51 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 1745

DETAILED ACTION

Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13, drawn to an electrode having particles with an average diameter less than 100 nm and a root mean square surface roughness less than 5 μm , classified in class 429, subclass 209.
 - II. Claims 14 -17, drawn to and electrode having particles with an average diameter less than 100 nm and a binder, classified in class 429, subclass 217.
 - III. Claim 18, drawn to an electrode with electroactive particles and exfoliated graphite, classified in class 429, subclass 231.8.
 - IV.. Claims 19-28, drawn to an electrode with a thickness less than 10 μm and comprising particles with an average diameter less than 100 nm, classified in class 429, subclass 209.
 - V. Claims 29-44, drawn to a battery comprising a positive electrode, a negative electrode, a separator and having particles with an average diameter less than 500 nm , classified in class 429, subclass 122.
 - VI. Claims 45-48, drawn to a battery structure with an electrode and a separator wherein a polymer forms a matrix between the electrode and a separator, classified in class 429, subclass 249.

Art Unit: 1745

VII. Claim 49, drawn to a circuit comprising a monolithic structure, classified in class 136, subclass 293.

VIII. Claims 50-51, drawn to a method for producing an electrode, classified in class 29, subclass 623.1.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I-VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are to electrodes with different features such a surface roughness, thickness, particle size or components..

3. Inventions VI (45-48) and VII (49) are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a battery and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner

Art Unit: 1745

finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Inventions VI (45-48) and VIII (50-51) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)).

In the instant case a battery may be made by another process.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and the search required for each group is not required for the other groups as the elements of each invention are different, restriction for examination purposes as indicated is proper.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

8. Due to the extensive number of groups restricted, no telephone call was made to request an oral election to the above restriction requirement.

Art Unit: 1745


Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Examiner Correspondence

10. Any inquiry regarding this communication or a previous communication should be directed to Examiner Mark Ruthkosky, Ph.D., whose telephone number is (703) 305-0587 or his supervisor, Gabrielle Brouillette, Ph.D., whose phone number is (703) 308-0756. Please note that Examiner Ruthkosky is out of the office the first Friday of each bi-week period.

The art unit 1745 unofficial fax number is 703-306-3429, while the PTO official fax number is 703-305-3599.


GABRIELLE BROUILLETTE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700